REMARKS

This amendment is responsive to the Office Action of June 2, 2008. Reconsideration and allowance of claims 1-16 are requested.

The Office Action

Claims 1-3, 5, 7-9, 11, and 13-16 stand rejected under 35 U.S.C. 102 as being anticipated by the newly cited reference of Stadler (US 6,397,100).

Claims 4, 6, 10, and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Stadler in view of Snyder (US 6,287,328).

The Finality of the June 2, 2008 Office Action is Premature

The new ground of rejection was not necessitated by the April 3, 2008 Amendment because claims which were subject to the new ground of rejection were not substantively amended.

Claim 13 was not substantively amended. Claim 13 was amended to remove the reference numerals which, have no effect on the scope of the claim. Claim 13 was also amended to correct the spelling of "correlation" as suggested by the Examiner in the January 4, 2008 Office Action. No other amendments were made. Because claim 13 was not substantively amended, nor were dependent claims 14 and 15, the Finality of the June 2, 2008 Office Action is clearly premature.

Claim 4 was placed in independent form including the subject matter of its parent claims 1, 2, and 3. Because a dependent claim is read as including all of the subject matter of its parent claims, placing a dependent claim in independent form including the subject matter of all of its parent claims is not a substantive amendment. Because the scope of claim 4 was not changed in the Amendment of April 3, 2008, it is submitted that the new ground of rejection against claim 4 was not necessitated by the applicant's Amendment.

Because the Examiner issued a new ground of rejection relative to claims which were not substantively amended, the new ground of rejection was not necessitated by the applicant's Amendment and the Finality of the Office Action of June 2, 2008 is premature and must be withdrawn.

The Claims Distinguish Patentably Over the References of Record

Claim 1 calls for determining whether an artifact was detected in one of the at least two event signals. Column 17, lines 32-67 of Stadler referenced by the Examiner does not address artifact detection. Rather, this section is concerned with ischemia detection. Ischemia is, of course, a restriction in the blood supply, which is to say the medical condition for which the patient is being monitored. Stadler does determine a noise value at column 21, lines 25-45, but this noise is determined in a manner which is unrelated to claim 1. The adaptive filter referenced by Stadler in the abstract is discussed at column 24, line 61 – column 25, line 33. More specifically, physiological ischemic changes of interest fall in a bandpass region. Elevation or depression ischemic changes that occur too fast are due to noise or axis shifts and ischemic changes that occur too slow are caused by medication, electrolyte disturbances, or other forms of baseline drift. However, determining the fast and slow filters again is unrelated to the limitations of claim 1. Because Stadler operates in a different way for a different purpose to achieve a materially different end result, it is submitted that Stadler is inapplicable to and does not anticipate claim 1.

Moreover, claim 1 calls for determining global and local correlation matrices. Stadler does not suggest determining global or local correlation matrices.

Claim 1 calls for determining a correlation vector indicative of a deviation between the local and global correlation matrices. Stadler does not determine a correlation vector.

Claim 1 further calls for determining an average deviation of the correlation vector. Again, Stadler does not disclose a correlation vector, much less determining the average deviation of one.

Further, claim 1 calls for determining whether an artifact was detected from the correlation vector and the average deviation. While Stadler does determine a general noisiness number or value, Stadler makes no suggestion of determining an artifact from a correlation vector and its average. Accordingly, it is submitted that **claim 1 and claims 2, 3, 5, and 6 dependent therefrom** distinguish patentably and unobviously over the references of record.

Claim 4 calls for an alarm indicator that triggers an alarm if (1) a monitored event signal crosses a threshold and (2) the controller determines that no artifact was detected in the event signal. By contrast, Stadler makes a gross

determination of the noisiness of the signals (column 21, lines 25-45). This gross noise can be used to determine whether the determined ischemia is a valid measurement and possibly could trigger an alarm signal, indicating that the operator should terminate further measurements and/or check the leads or other system elements to determine the problem. Moreover, claim 4 calls for determining whether an artifact is present by determining local and global correlations, determining a current deviation between the local and global correlations, and determining an average deviation. Again, such a method of artifact determination is not shown by Stadler or Snyder.

Accordingly, it is submitted that **claim 4** distinguishes patentably and unobviously over the references of record.

Claim 7 is directed to a method for detecting a signal artifact in event signals. By contrast, Stadler determines the noisiness of event signals. There is no determination in Stadler of the presence of an artifact in the event signals. Stadler also uses fast and slow filtering to remove apparent measured ischemia changes which change too fast or too slow. Such a filtering of out of range signals does not make a determination whether an artifact is present. Rather, due to the filtering, any changes which are too fast or too slow would be filtered out, without making a determination that an artifact was detected.

Accordingly, it is submitted that **claim 7 and claims 8-12 dependent therefrom** distinguish patentably and unobviously over the references of record.

Claim 13 is directed to a system for detecting a signal artifact in an event signal. The section of Stadler referenced by the Examiner is directed to monitoring ischemia, the monitored condition. Contrary to the Examiner's assertion, column 17, lines 32-67 does not disclose the means for determining whether an artifact was detected. Accordingly, it is submitted that **claim 13 and claims 14-16 dependent therefrom** distinguish patentably and unobviously over the references of record.

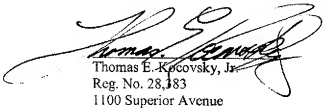
CONCLUSION

For the reasons set forth above, it is submitted that claims 1-16 are not anticipated by and distinguish patentably and unobviously over the references of record. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is requested to telephone Thomas Kocovsky at (216) 861-5582.

Respectfully submitted,

Fay Sharpe LLP



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